

In the Claims

1. (Original) A plastid transformation vector for stably transforming a plastid genome comprising, as operably linked components, a first flanking sequence, a DNA sequence coding for psbA or a substantially homologous sequence of psbA, a 5'untranslated region (UTR), a DNA sequence coding for human serum albumin (HSA), and a second flanking sequence.

2. (Original) The vector of Claim 1 further comprising a regulatory sequence.

3. (Original) The vector of Claim 2, wherein said regulatory sequence comprises a promoter operative in said plastid.

4. (Original) The vector of Claim 2, wherein said promoter is Prm.

5. (Original) The vector of Claim 1, wherein the transformation vector is competent for stably integrating in the plastid genome of higher plant species and wherein the flanking sequences are substantially homologous to sequences in a spacer region of said plastid genome, and wherein said flanking sequences are conserved in the plastid genome of said higher plant species.

6. (Original) The vector of Claim 5, wherein said spacer region is a transcriptionally active spacer region.

7. (Currently Amended) The vector of Claim 1, wherein the plastid is selected from the group consisting of chloroplast, chromoplast, amyloplast, proplastideproplastid, leucoplast and etioplast.

8. (Original) The vector of Claim 1, further comprising a DNA sequence encoding a selectable marker.

9. (Original) The vector of Claim 8, wherein said selectable marker is an antibiotic- free selectable marker.

10. (Original) The vector of Claim 9, wherein said DNA sequence encoding a selectable marker encodes Betaine aldehyde dehydrogenase (BADH).

11. (Original) The vector of Claim 8, wherein said DNA sequence encoding a selectable marker encodes an antibiotic resistance selectable marker.

12. (Original) The vector of Claim 11, wherein said antibiotic resistance selectable marker is aadA.

13. (Original) The vector of Claim 1, wherein the 5'UTR is a 5'UTR of said psbA.

14. (Original) A plastid transformation vector for stably transforming a plastid comprising, as operably linked components, a first flanking sequence, a promoter operative in said plastid, a DNA sequence coding for a selectable marker capable of expression in said plastid, a DNA sequence coding for human serum albumin or a substantially homologous sequence thereof, and a second flanking sequence.

15. (Original) The vector of Claim 1, competent for hyper-expression of HSA, in a plant transformed with said plastid transformation vector, wherein said plant expresses at least 0.1 mg HSA per gram/g fresh weight of said plant.

16. (Original) An isolated HSA, wherein said HSA is contained within inclusion bodies, and wherein said inclusion bodies are located in chloroplasts transformed with the vector of Claim 1.

17. (Original) The isolated HSA of Claim 16, wherein said inclusion bodies reduce the protolysis of HSA.

18. (Original) The isolated and purified HSA of Claim 17, wherein said HSA is recovered from said inclusion bodies wherein said HSA maintains proper folding after the HSA is recovered from said inclusion bodies.

19. (Original) The isolated HSA of Claim 18, wherein the HSA is properly refolded when removed from said inclusion bodies so that the HSA is structurally equivalent to native human HSA.

20. (Original) The isolated HSA of Claim 19, wherein the inclusion bodies facilitate purification of said HSA from other cellular proteins.

Claims 21-44 (cancelled).